<u>PATENT</u>

## **AMENDMENTS TO THE CLAIMS**

- 1. (Currently Amended) A disc Disc brake (10), comprising
  - [[-]] two brake shoes (16, 18), which for generating a clamping force (B, B') are pressable against both sides of a brake disc (20);
  - [[-]] a conversion device (42), which is connectable to a motor (30) and which converts a driving motion of the motor (30) into an actuating motion for actuating at least one of the brake shoes (16, 18); and
  - [[-]] a support device (62) for taking up a reaction force (C), which upon generation of the clamping force (B, B') is introduced into the conversion device (42); and

## characterized-in

that between the conversion device (42) and the support device (62) at different positions two or more force sensors are disposed for measuring at least a fraction of the reaction force (C) and disposed at different positions between the conversion device and the support device.

- 2. (Currently Amended) The disc Disc brake according to claim 1, characterized in that wherein the two or more force sensors (80) have a planar form of construction.
- 3. (Currently Amended) The disc Disc brake according to claim 1 or 2, characterized in that wherein the two or more force sensors (80) are piezoelectric sensors.
- 4. (Currently Amended) The disc Disc brake according to one of claims 1 to 3

  <u>claim 3</u>, characterized in that wherein the two or more force sensors (80) have
  piezoresistive layers (90) applied onto planar substrates (92).

**PATENT** 

- 5. (Currently Amended) The disc Disc brake according to one of claims 1 to 4 claim 1, characterized in that wherein the disc brake (10) comprises two or more force sensors (80, 80', 80"), which are disposed at a distance from one another in a plane at right angles to a longitudinal axis (A) of the disc brake (10).
- 6. (Currently Amended) The disc Disc brake according to one of claims 1 to 5 claim 1, characterized in that wherein the disc brake (10) comprises four or more force sensors (80, 80', 80'', 80'''), and wherein each two adjacent force sensors (80, 80', 80'', 80''') have an angular distance in the order of magnitude of 90° or less in relation to the longitudinal axis (A) of the disc brake (10).
- 7. (Currently Amended) The disc Disc brake according to one of claims 1 to 6

  claim 1, characterized in that wherein the support device (62) is coupled rigidly to a housing (60) of the disc brake (10).
- 8. (Currently Amended) The disc Disc brake according to claim 7, characterized in that wherein the support device comprises a step (62) formed in the housing (60) of the disc brake (10).
- 9. (Currently Amended) The disc Disc brake according to claim 8, characterized in that wherein the two or more force sensors (80) are applied onto the step (62) or integrated at least partially into the step (62).
- 10. (Currently Amended) The disc Disc brake according to one of claims 1 to 8 claim 1, characterized in that between the conversion device (42) and the support device (62) wherein a carrier (84) is disposed for receiving the force sensor (80) between the conversion device and the support device for receiving the two or more force sensors.

- 11. (Currently Amended) The disc Disc brake according to one of claims 1 to 8 claim 1, characterized in that wherein a bearing is disposed between the conversion device (42) and the support device (62) a bearing (64) is disposed and the two or more force sensors (80) are fastened in or on a component (76) of the bearing (64).
- 12. (Currently Amended) The disc Disc brake according to one of claims 1 to 11 claim 1, characterized in that wherein the conversion device (42) converts a rotary driving motion of the motor (30) into a translatory actuating motion for actuating at least one of the brake shoes (16, 18).
- 13. (Currently Amended) The disc Disc brake according to claim 12, characterized in that wherein the support device (62) interacts with a component (46) of the conversion device (42), which component is settable in rotational motion.
- 14. (Currently Amended) The disc Disc brake according to claim 12 or 13, characterized in that wherein the conversion device (42) comprises a nut/spindle arrangement (44, 46, 50).
- 15. (Currently Amended) The disc Disc brake according to claim 14, characterized in that wherein the support device comprises a step formed in the housing of the disc brake and wherein the spindle (46) is settable in rotational motion and supported relative to the reaction force (C) against the step (60).
- 16. (Cancelled)
- 17. (New) A disc brake, comprising
  a brake disc;two brake shoes pressable against opposite sides of the brake disc;

a conversion device for converting a driving motion of an electromotor into an actuating motion for actuating at least one of the break shoes; a support device for receiving a reaction force that is introduced into the conversion device when the brake shoes are pressed against the brake disc; and at least two force sensors for receiving at least a fraction of the reaction force, the force sensors being arranged at an angular distance from one another with respect to an axis of rotation of the brake disc.

- 18. (New) A vehicle brake system having a disc brake, the disc brake comprising two brake shoes, which for generating a clamping force are pressable against both sides of a brake disc;
  - a conversion device, which is connectable to a motor and which converts a driving motion of the motor into an actuating motion for actuating at least one of the brake shoes;
  - a support device for taking up a reaction force, which upon generation of the clamping force is introduced into the conversion device; and two or more force sensors for measuring at least a fraction of the reaction force and disposed between the conversion device and the support device at different positions.